

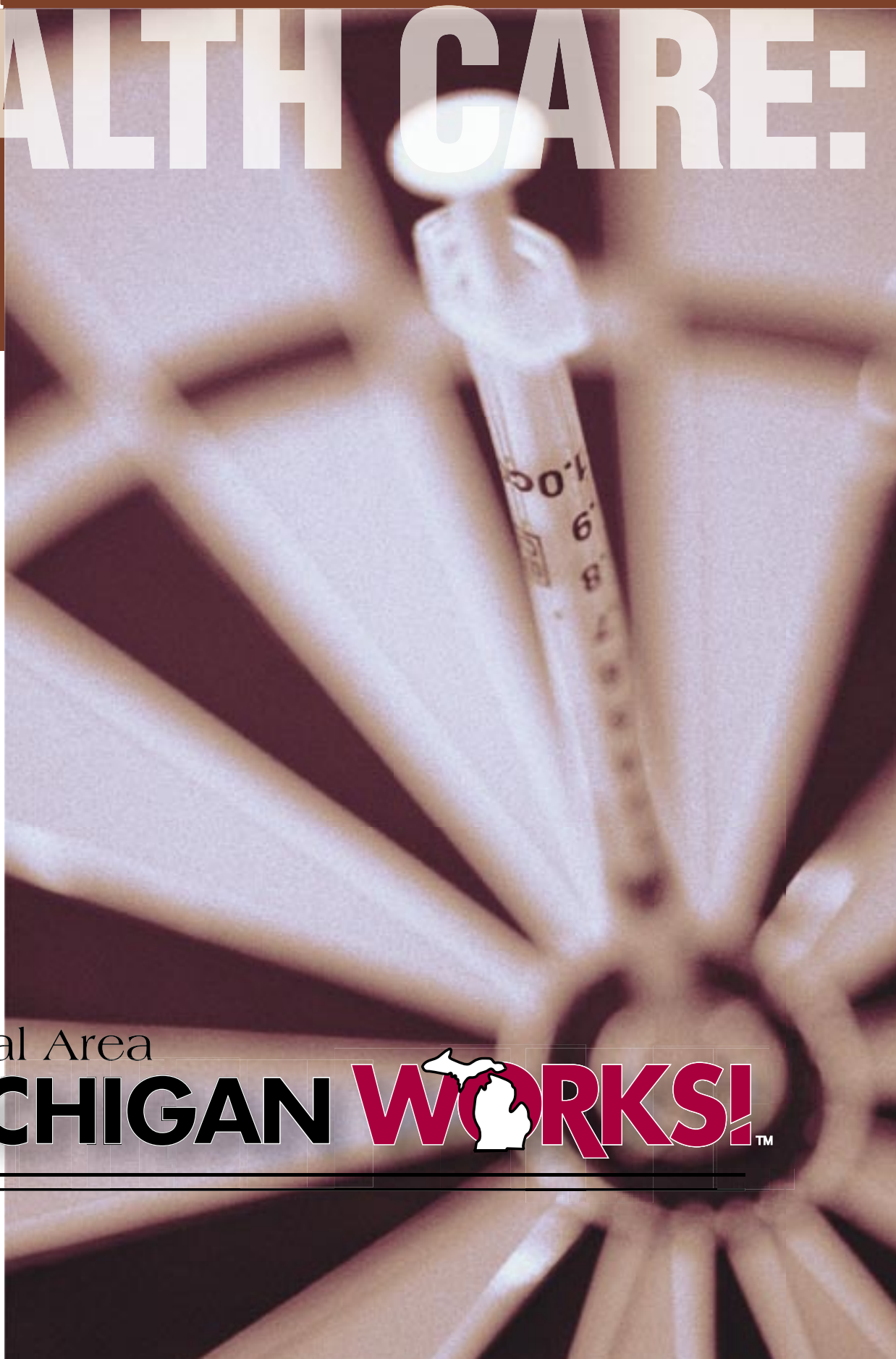
Capital Area

HEALTH CARE:

The
Jobs Machine

Capital Area

MICHIGAN WORKS!™



Dear Friends:

Think back to the last time you visited your doctor's office with a sick child, or had a CT scan in the hospital, or paid a visit to a loved one in a long-term care setting. What you probably remember most about those experiences are the people who helped you through an uncertain or trying time; those highly-trained, compassionate people in the health care industry who have dedicated their lives to serving the health care needs of the people of Michigan.

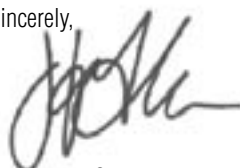
Either directly or indirectly, more than 675,000 people in this great state work every day to deliver the high quality health care services that we have come to know and upon which we depend. Over the next 20 years — as our population ages, “baby boomers” retire, and the demand for health care workers increases — that number is expected to grow.

Because the need for highly trained and qualified health care workers has never been greater, I proposed the *MI Opportunity Partnership* in my 2005 State of the State address. This new initiative will match and place citizens now looking for work in the health care field in health care jobs that are currently open. While the *MI Opportunity Partnership* initiative will help fill existing vacancies, we must continue to look to the future to train the next generation of doctors, nurses, pharmacists, EMTs, paramedics, x-ray techs, therapists, physicians' assistants and lab technicians so we have a new cast of health care workers waiting in the wings. And the capital area is uniquely poised to meet the demand for health care workers through local training at Lansing Community College, Michigan State University and other higher education institutions.

We've got a great start in training and supplying health care workers, but we've got more work to do. Only through collaboration and cooperation will Michigan's businesses be able to thrive. That is why I provided more than \$1 million in grants last year to support Michigan Regional Skills Alliances (MiRSAs). MiRSAs are locally-managed partnerships formed to address workforce issues affecting firms operating in the same industry in a distinct geographic area. Among the challenges the MiRSAs set out to resolve are worker shortages, skill shortages, training mismatches, employee recruitment and retention, and organizational design. Reports such as “Healthcare: The Jobs Machine” will help spark the dialogue necessary to create and sustain vital industry partnerships and truly embrace the MiRSA philosophy.

Michigan is poised and ready to become a hub for growth in the health care field and in the increasingly important health care jobs that will reshape Michigan from the buckle of the 20th century rustbelt into the hub of the 21st century's knowledge-based economy.

Sincerely,



Jennifer M. Granholm
Governor

Dear Colleagues:

It is no secret health care employment is “booming.” National media has focused on nursing shortages, but health care employment is more than just nursing. There are a myriad of health care careers most of us have never even heard of that pay above-average wages and require less training than the traditional four-year degree. Are we recruiting the brightest and best to become dental hygienists and laboratory technologists?

We here in the capital area are uniquely poised to become a health care center of excellence. We are unique in our possession of not only fine health care providers, but Michigan State University, Lansing Community College and other education providers. We can locally meet our own demand for health care labor — but only if we join together to strengthen and enhance the tri-county area's health care sector, an industry whose total direct economic impact in the capital area is now more than \$1.4 billion.

I commend Ingham Regional Medical Center; Sparrow Health System; Ingham County Medical Society; Michigan State University's College of Human Medicine and Lansing Community College's Human, Health and Public Service Careers Division for taking the first step and coming together with us to create this report. I also thank the State of Michigan Bureau of Labor Market Information and Strategic Initiatives, as well as the Regional Economic Development Team for being partners in “Healthcare: The Jobs Machine,” and a special thanks to Larry Rosen of Public Policy Associates for authoring the report. Please contact us if you have any questions about the study or have suggestions related to the issues raised by the report. Thank you for your interest.

Sincerely,



Douglas E. Stites
Chief Executive Officer
Capital Area Michigan Works!





Executive Summary

Becoming a center of excellence

The capital area is unique in its ability to meet the growing demand for health care labor through the region's educational resources, giving Lansing the potential to become a health care "center of excellence."

The capital area's growing health care sector has the potential to continue providing excellent health care services to current residents, but also to employ more local job seekers, to attract health care businesses and practitioners from other areas to live and work in the tri-county region and to become a health care service destination for out-of-town patients, contributing to local restaurants, hotels, stores and other businesses.

Health care is one of the fastest growing sectors and will continue to grow. It provides opportunities at all skill and wage levels and the majority of skilled occupations in health care are not at-risk for out-sourcing or elimination by technological advances.

Its economic impact is staggering, and by establishing the capital area as a health care center of excellence, the positive economic benefits of the local health care industry will only increase.

- The economic "output" for the health care industry in Michigan grew from \$3.5 billion in 1977 to almost \$24 billion by 2002 and now represents approximately 7 percent of all goods and services produced in Michigan each year.
- The economic impact of every health care employee in the capital area is approximately \$55,000 per year, and the total economic impact in the capital area is estimated at \$1.4 billion annually.
- 8 of every 100 jobs in Michigan are directly provided by health care organizations and 12 out of every 100 jobs are directly or indirectly related to health care.
- By the end of 2004, the health care sector employed 22,000, or 7.5 percent, of all workers in the capital area.
- Approximately 1,000 capital area residents are directly involved in educating the next generation of physicians, nurses, health care technicians and direct-care workers.
- Since 1977, health care employment in the capital area has more than doubled while manufacturing employment dropped by 40 percent.
- Local health care jobs will grow nearly twice as fast as total industry employment growth throughout this decade—more than 17 percent growth for health care alone versus 10 percent growth for all industry employment.
- By 2012, the capital area will need nearly 4,000 new and replacement health care workers.

"As an elected official, I recognize the significant economic impact of health care. The discussion about moving Michigan State University health care educators and practitioners from East Lansing to Grand Rapids was a wake-up call for this region of just how important health care is as an employer. The economic impact in our region is invaluable and is only going to grow in the future."

Mark Meadows
Mayor
City of East Lansing



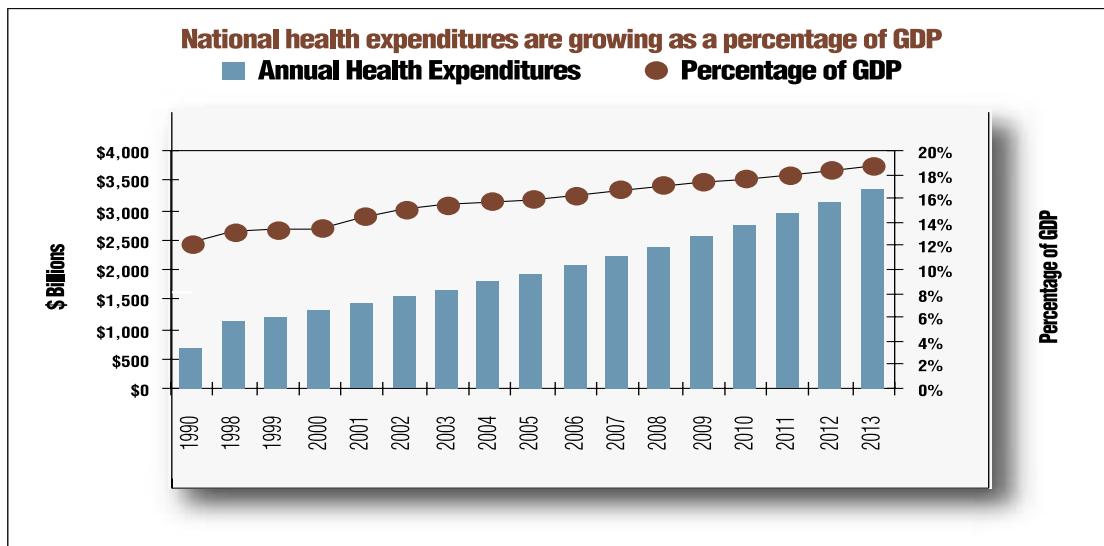
Capital Area

HEALTH CARE: THE JOBS MACHINE

Health care is one of the most vigorous growth sectors

Health care is one of the fastest growing industries in the United States, fueled by an aging population, technological innovation and more public interest in health care services than ever before. Approximately \$1 of every \$7 spent in the United States is for some aspect of health care, from a highly sophisticated medical procedure to a bottle of aspirin.

Health care is also one of the nation's most important areas for investment, technological innovation and economic growth. Health care expenditures in the United States will reach the staggering figure of \$2 trillion this year, and individual health care expenditures will exceed \$9,000 per person per year by 2010.



Source: Centers for Medicaid and Medicare Services, Office of the Actuary, 2004.

Although Michigan is one of North America's centers for durable goods manufacturing, health care has grown to be one of Michigan's most important industries over the past 25 years. **The economic "output" for the health care industry in Michigan grew from \$3.5 billion in 1977 to almost \$24 billion by 2002 and now represents approximately 7 percent of all goods and services produced in Michigan each year.**

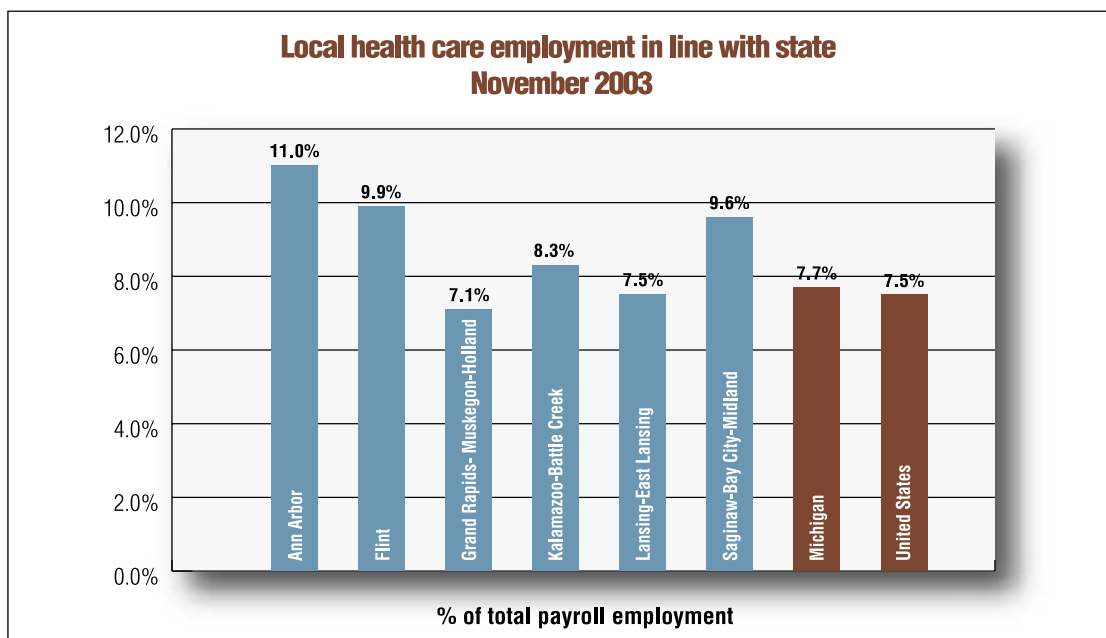
"Medical schools and high quality health care are very important for bringing other industry to the region – just as it is important to have a good airport and good local education."

Dennis Swan
Interim President & CEO
Sparrow Health System

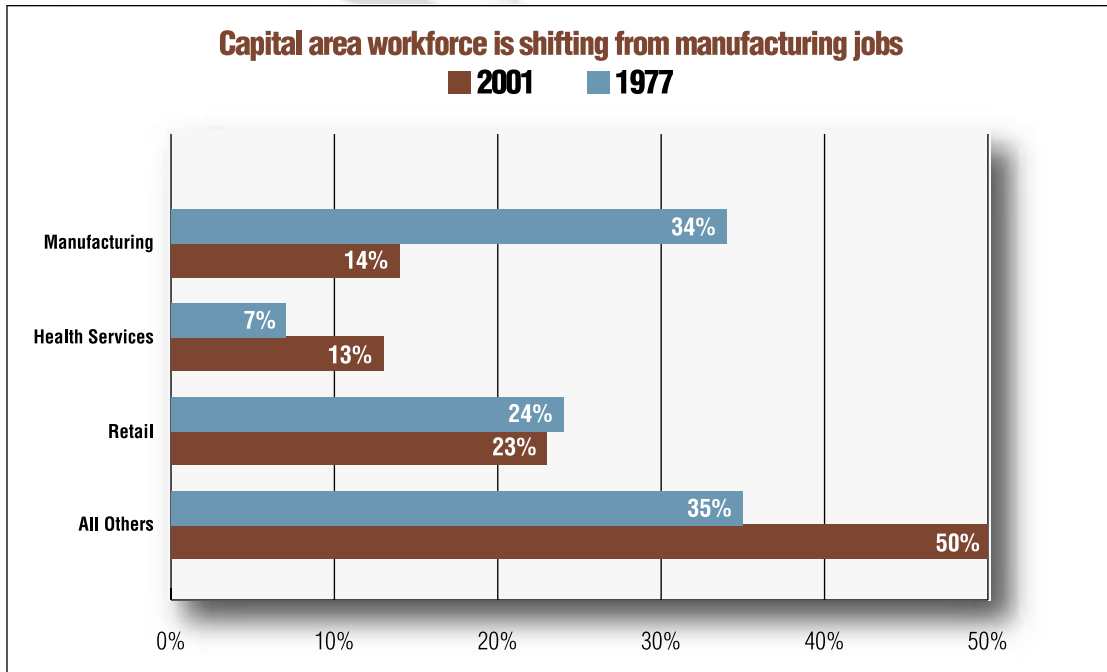
The capital area is uniquely poised for health care excellence

Michigan's capital area is one of only three locations in the state that is both a major center for health care services and a major center for the education of Michigan's next generation of health care professionals. **By the end of 2004, the health care sector employed 22,000, or 7.5 percent, of all workers in the area, including 10,000 health care professionals and technicians, 5,000 health aides who work directly with patients and 7,000 others who provide clerical, maintenance and other support activities.** These people work in a variety of settings, including five area hospitals, fifteen long-term care facilities, doctors' offices, home health agencies, dentist offices, clinics and other locations. Not included in these figures are employees of related activities including manufacturers and retailers of medical equipment and supplies, medical equipment wholesalers and pharmaceutical manufacturers.

Health care employment in the capital area is on par with both statewide and national percentages. Although some other areas in Michigan have comparable or even larger proportions of their workforces engaged in health care, the capital area has a more balanced and stable economic base, due in part to state government, higher education and manufacturing.



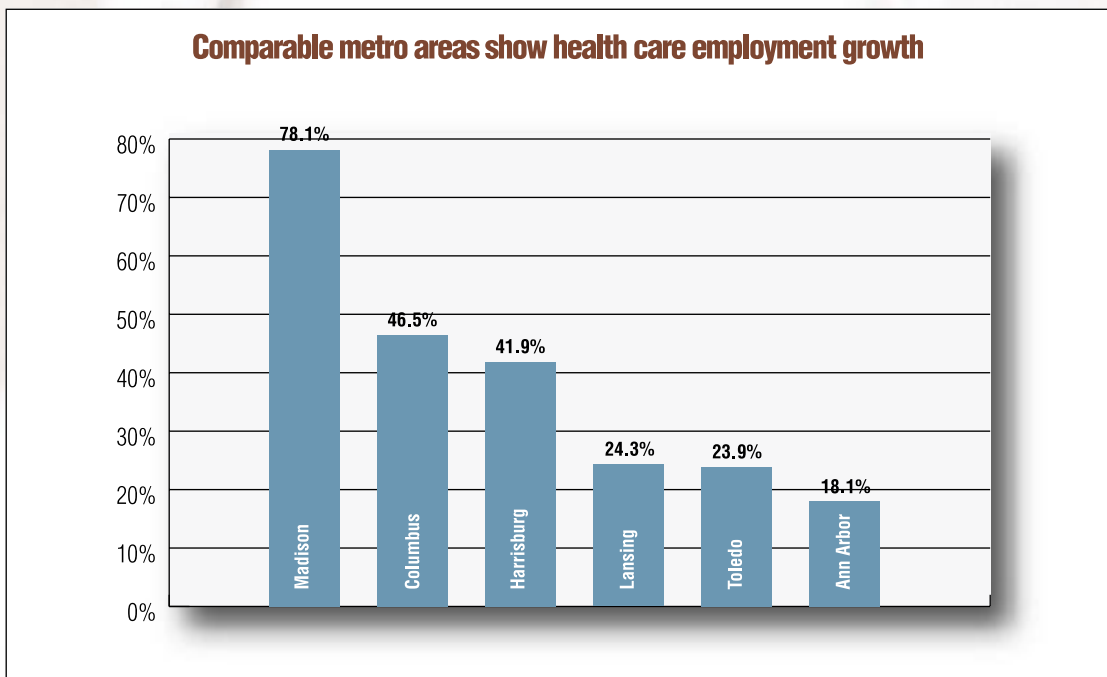
Source: Bureau of Labor Statistics, *Occupational Employment Statistics*, November 2003.



Source: Bureau of the Census, *County Business Patterns*, 1977 - 2001.

Health care education is another important part of the capital area's economic mix. **Approximately 1,000 capital area residents are directly involved in educating the next generation of physicians, nurses, health care technicians and direct-care workers, and these activities add millions of dollars annually to the capital area's economy.** Major resources are the Colleges of Human Medicine, Osteopathic Medicine and Nursing at Michigan State University along with human health career programs at Lansing Community College.

The capital area has also experienced fairly rapid growth in health care sector employment in recent years, typical of state capitals in the Midwest with large universities and medical colleges as well as strong government and manufacturing sectors.



Source: Bureau of Labor Statistics, *Current Employment Statistics*, 1990-2003.



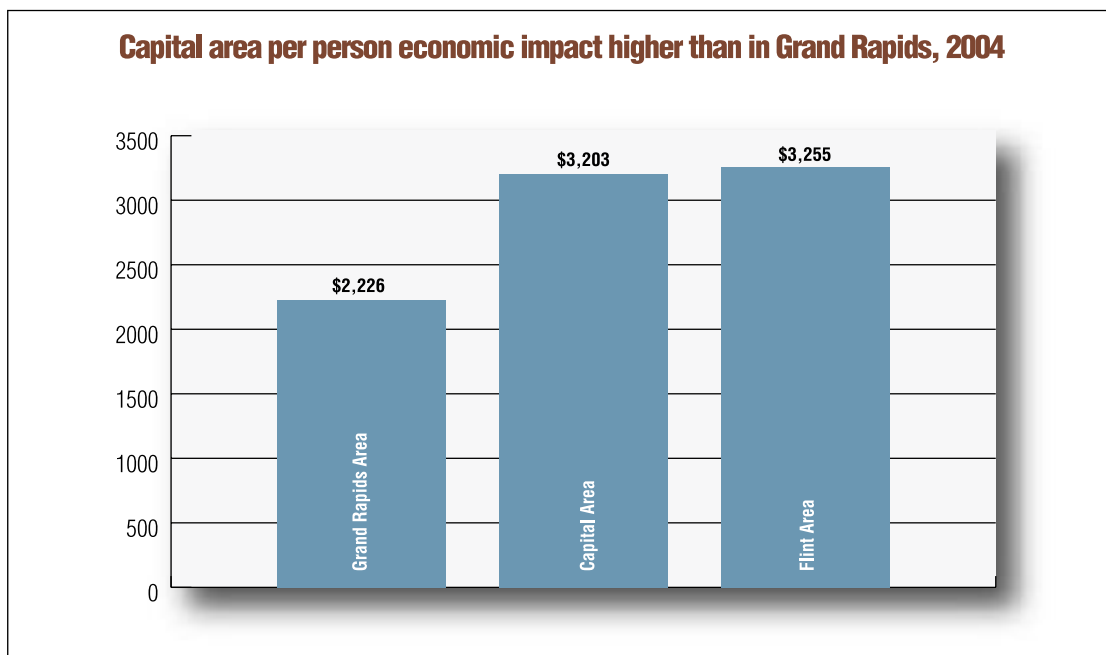
"All hospitals are investing locally, generating a lot of income and construction jobs for the community"

Dennis Litos
President & CEO
Ingham Regional Medical Center

Health care contributes to the capital area's economic well being

The economic impact of the health care industry will continue to grow as the number of the health care workers grows and health care wages continue to rise. In addition, of the 22,000 people employed in the "health care sector," employment figures exclude the area's health care educators, administrators and researchers who are well paid but who show up in other industry categories.

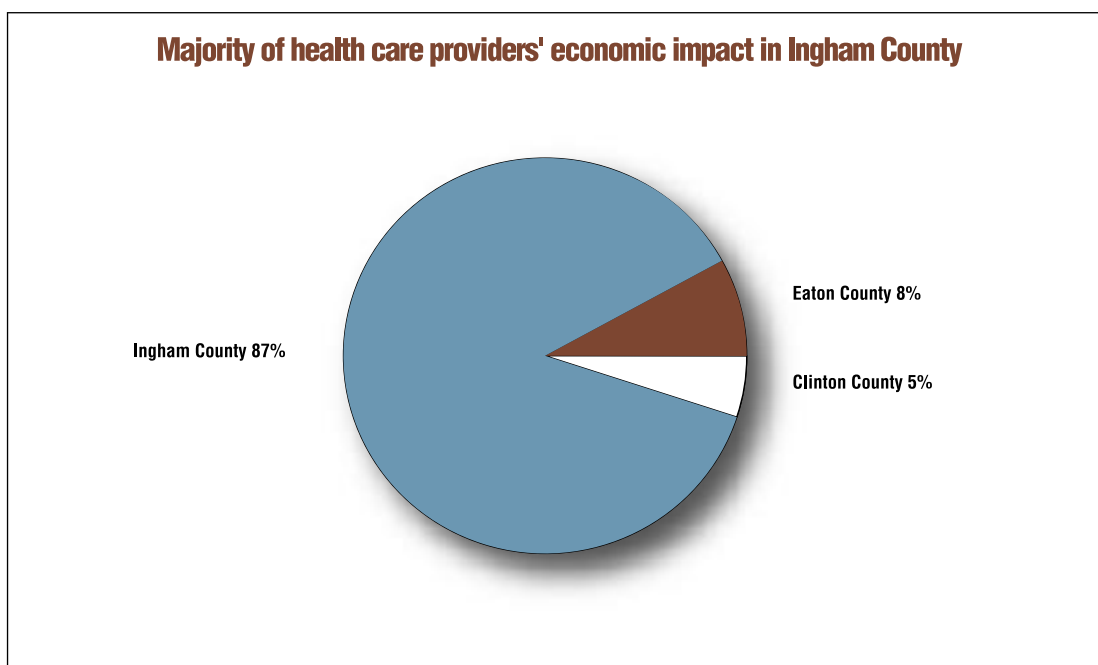
In 2004, several statewide health care trade associations released a study of the economic impact of health care throughout Michigan and within each of its counties. **According to the study, 8 of every 100 jobs in Michigan are directly provided by health care organizations and 12 of every 100 jobs are directly or indirectly related to health care.** For the capital area, direct and indirect employment in health care added up to 26,900 jobs that produced more than \$1 billion in salaries and wages per year.



Source: Partnership for Michigan's Health, *The Economic Impact of Health Care in Michigan*, 2004. www.economicimpact.org; Bureau of the Census, 2004.

The state-wide study estimated the economic impact of every health care employee in the capital area is approximately \$55,000 per year, and the total economic impact in the capital area is estimated at more than \$1.4 billion. Per person economic impact is more reflective of the “representative” impact. It shows even though the Grand Rapids area has a higher total economic impact from health care, the Grand Rapids area also has more people, resulting in a 30 percent lower per person impact. **To put it simply, every health care dollar spent in the capital area is “worth” more as a part of the total economy.**

In addition, the capital area is a major center for health care career education and research. **A recent study commissioned by Michigan State University’s College of Human Medicine estimated the economic impact of the university’s two medical schools across the entire state totaled \$94 million in 2003.** Nearly 1,000 jobs are directly or indirectly based on these two programs, and most of the jobs and financial impact are right here in the capital area. By 2015, the economic impact of medical education is expected to more than double, and the majority of the impact will continue to be in the capital area. The study also estimated externally-funded research at the College of Human Medicine could have an additional impact of up to \$300 million during the next ten years and that 1,200 to 3,000 jobs are likely to be created as a result of the commercialization of some research activities.



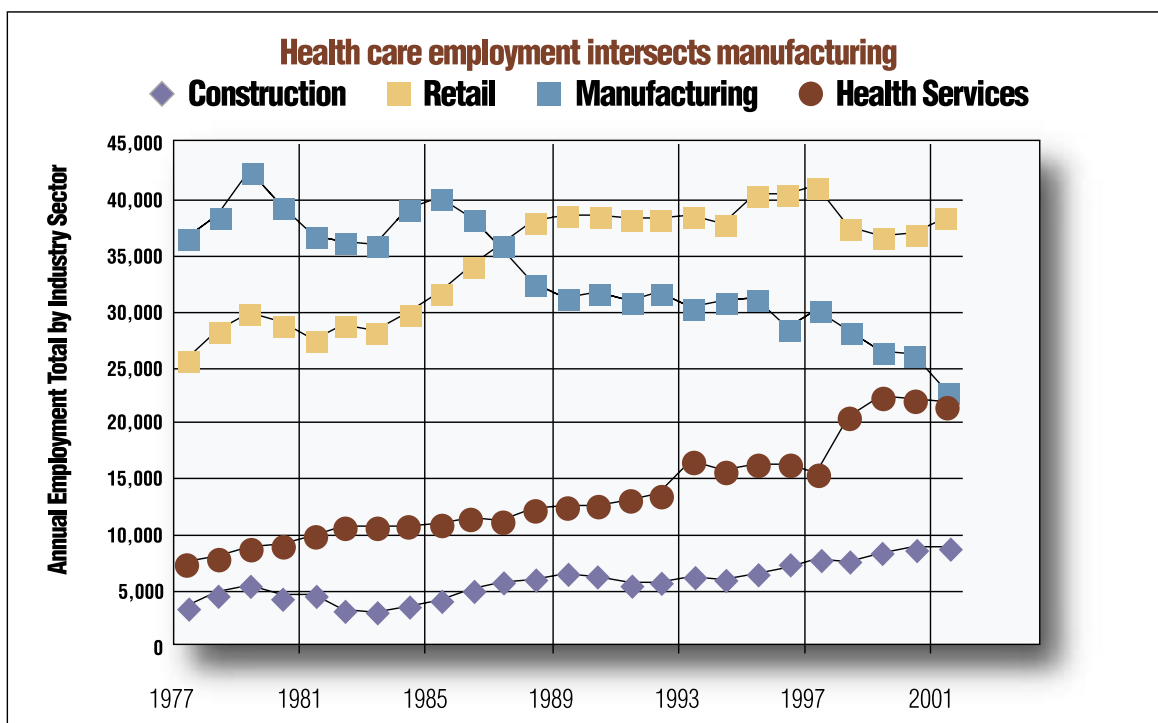
Source: Partnership for Michigan's Health, *The Economic Impact of Health Care in Michigan*, 2004. www.economicimpact.org

Within the capital area, health care services and employment are concentrated in Ingham County. Most notable are the region's two major medical systems, Sparrow Health System and Ingham Regional Medical Center, as well as the Clinical Center at MSU and a majority of the area's private practice physicians and other health care providers. With 83 percent of the area's health care workers and 87 percent of health care wages and salaries, the impact is more than \$1.2 billion per year for Ingham County alone. The impact on Clinton and Eaton Counties, however, is not insignificant, as these counties support Clinton Memorial Hospital, Eaton Rapids Medical Center, Hayes Green Beach Memorial Hospital, and have a number of physicians, dentists and other health care professionals. It is likely health care career opportunities will grow in Clinton and Eaton Counties as their populations continue to grow in the years to come.



Health care is generating “good jobs”

Despite the importance of the automobile industry for the capital area, technology and automation have increased productivity while reducing the need for autoworkers, leading to declining employment in manufacturing. In comparison, health care employment in the area has increased almost every year since the late 1970s, and by the end of 2004 had grown to be nearly equal to the capital area's entire manufacturing sector. **Since 1977, health care employment in the capital area has more than doubled while manufacturing employment has dropped by 40 percent.** The retail sector also boasts steady growth — up 60 percent — and construction employment has boomed — doubling since 1977.



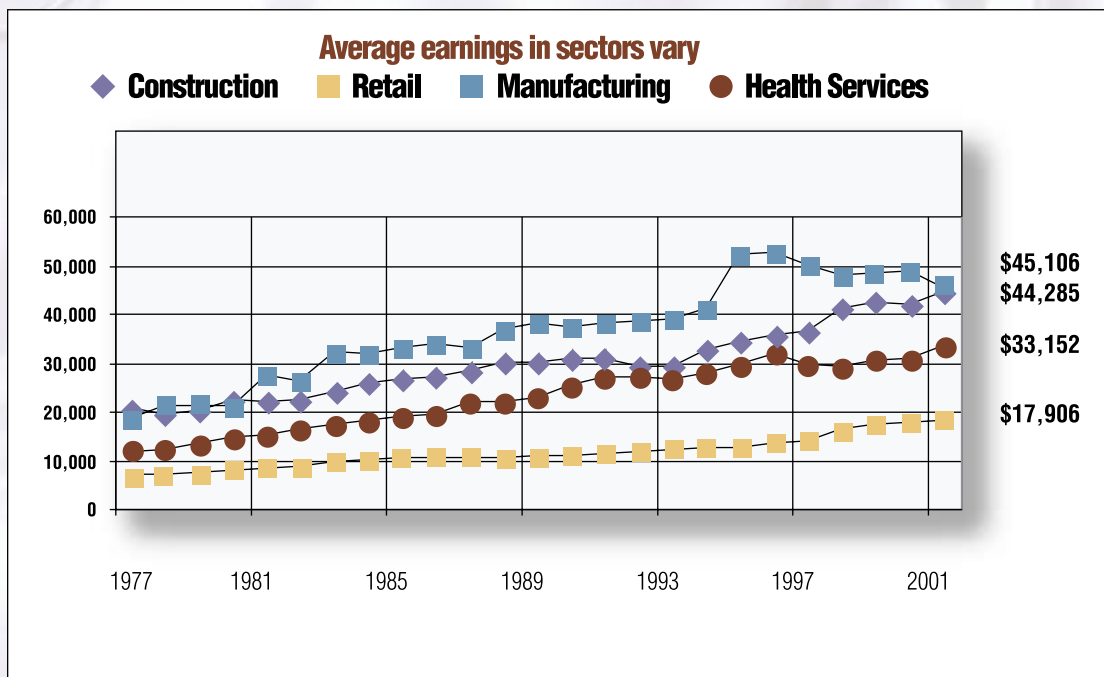
*Health care employment increase in 1998 is partially due to conversion to new industry classification system.
Source: U.S. Bureau of the Census, County Business Patterns, 1977-2002.

"It is important for the mid-Michigan area to have a robust health care economy to attract and maintain high-quality physicians."

Edward M. Lanigan, MD
President, Ingham County Medical Society
Capital Area Physician

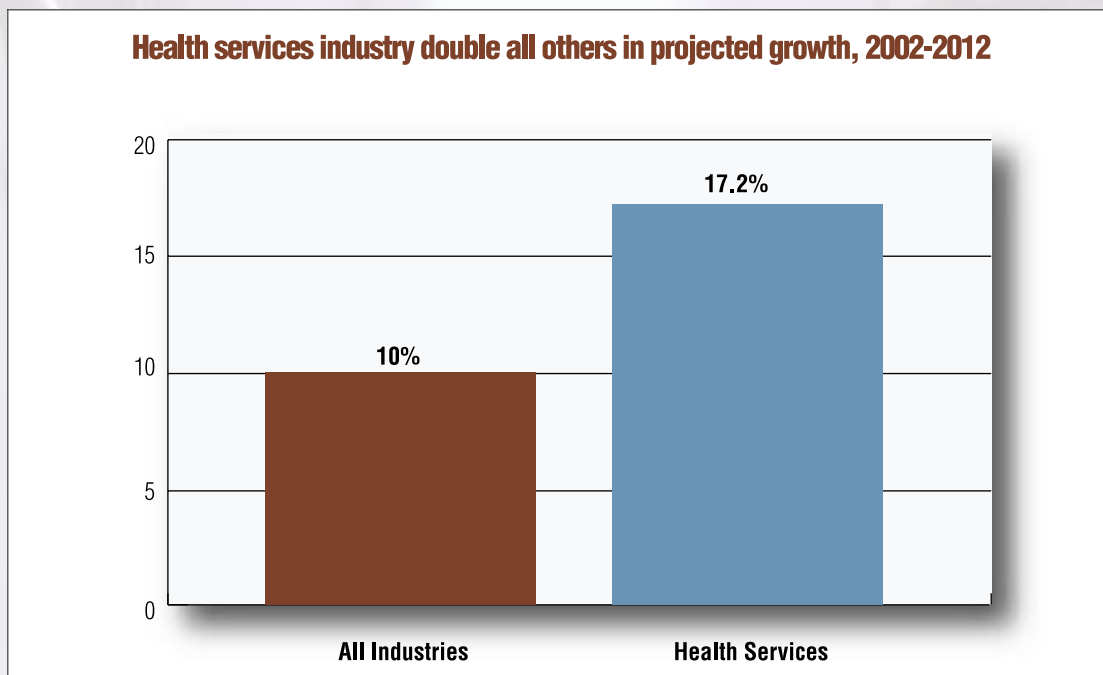
Health care careers boast high wages, lots of jobs

Many health care jobs pay relatively well and there is great potential for future growth. These jobs have helped compensate for some losses of well-paid manufacturing jobs in the area. Many other growing employment sectors in the capital area do not pay well or comprise a much smaller potential for growth than health care. For example, retail employs a lot of people, but the average wage in 2001 was less than \$20,000 per year. Construction work pays well, but construction workers still only represent a small portion, 5.2 percent, of the capital area's total workforce. Jobs in finance, insurance and real estate pay \$50,300 annually on average — better than health care — but employment in the sector is only half that of health care.



Source: U.S. Bureau of the Census, *County Business Patterns*, 1977-2002.

Local health care jobs will grow nearly twice as fast as total industry employment growth throughout this decade - more than 17 percent growth for health care alone versus 10 percent growth for all industry employment. Health care is by far one of the fastest growing sectors overall and is expected to substantially outpace construction, retail and manufacturing.



Source: Michigan Department of Labor and Economic Growth, Labor Market Information, 2004.

The growing demand for health care workers in the capital area is based on several trends:

- * Population growth;
- * Aging baby boomers;
- * More sophisticated health care technology;
- * Retirement among health care workers; and
- * Growing demand for more health services than ever before.

"The Lansing area has always been defined by the three pillars of our economy—GM, MSU and state government. Maybe we should start looking at health care as the fourth pillar of our economy in this region."

Tim Johnson
Chief Operating Officer
Eaton Rapids Medical Center

Although overall population growth has been modest, the capital area is still growing, and more people in the area means more health services are needed. As the baby boomers age they, too, will need more health care services to deal with the ailments of old age. More and better technology requires trained technicians, and generates demand for health care services that were not even available only a short time ago. Some of the growth will also result from the need to replace the health care workers who retire, change occupations or drop out of the labor force between now and 2012. Like the rest of the population, the health care workforce is aging, and retirement is on the horizon for many health care workers. **By 2012, the capital area will need 3,900 new and replacement health care practitioners, professionals and technical specialists. The greatest demand will be for more than 1,500 additional nurses, 250 licensed practical nurses, 180 physicians and surgeons, 160 dental hygienists and 130 pharmacists.** There will also be a substantial demand for more therapists of all sorts, laboratory technologists and technicians and medical records technicians.

**Capital area health care practitioners and technicians most in demand
2002 - 2012**

Occupation	New Jobs	Replacement Jobs	Total Demand
All Healthcare Practitioner/Technical Occupations	1,730	2,140	3,870
Registered Nurses	680	850	1,530
Licensed Practical Nurses	60	190	250
Physicians & Surgeons	100	80	180
Dental Hygienists	120	40	160
Pharmacists	80	50	130
Respiratory Therapists	60	60	120
Medical Records/Health Info Technicians	60	30	90
Medical & Clinical Laboratory Technicians	30	50	80
Pharmacy Technicians	50	30	80
Radiologic Technologists & Technicians	30	50	80
Opticians, Dispensing	30	40	70
Cardiovascular Technologists/Technicians	30	30	60
Occupational Therapists	30	20	50
Physician Assistants	30	20	50
Physical Therapists	40	10	50

Source: Michigan Department of Labor and Economic Growth, Labor Market Information, 2005.

"Health care has quietly evolved into a leader in Lansing in terms of revenue and employment."

Dennis Litos
President & CEO
Ingham Regional Medical Center

"Education of allied health care personnel needs to focus on training locally and keeping people working locally."

Dennis Swan
Interim President & CEO
Sparrow Health System

By 2012 there will also be a need for almost 2,000 health care support workers who assist practitioners and who provide direct patient care in long-term care facilities, home health care settings and elsewhere.

**Capital area health care support occupations most in demand,
2002 - 2012**

Occupation	New Jobs	Replacement Jobs	Total Demand
All Healthcare Support Occupations	1,110	870	1,980
Nursing Aides, Orderlies, & Attendants	280	210	490
Medical Assistants	330	160	490
Home Health Aides	300	100	400
Dental Assistants	130	160	290
Other Healthcare Support Workers	60	100	160
Psychiatric Aides	0	70	70
Medical Transcriptionists	20	30	50
Physical Therapist Assistants	20	10	30
Massage Therapists	10	10	20
Medical Equipment Preparers	10	10	20
Pharmacy Aides	10	10	20
Physical Therapist Aides	10	0	10

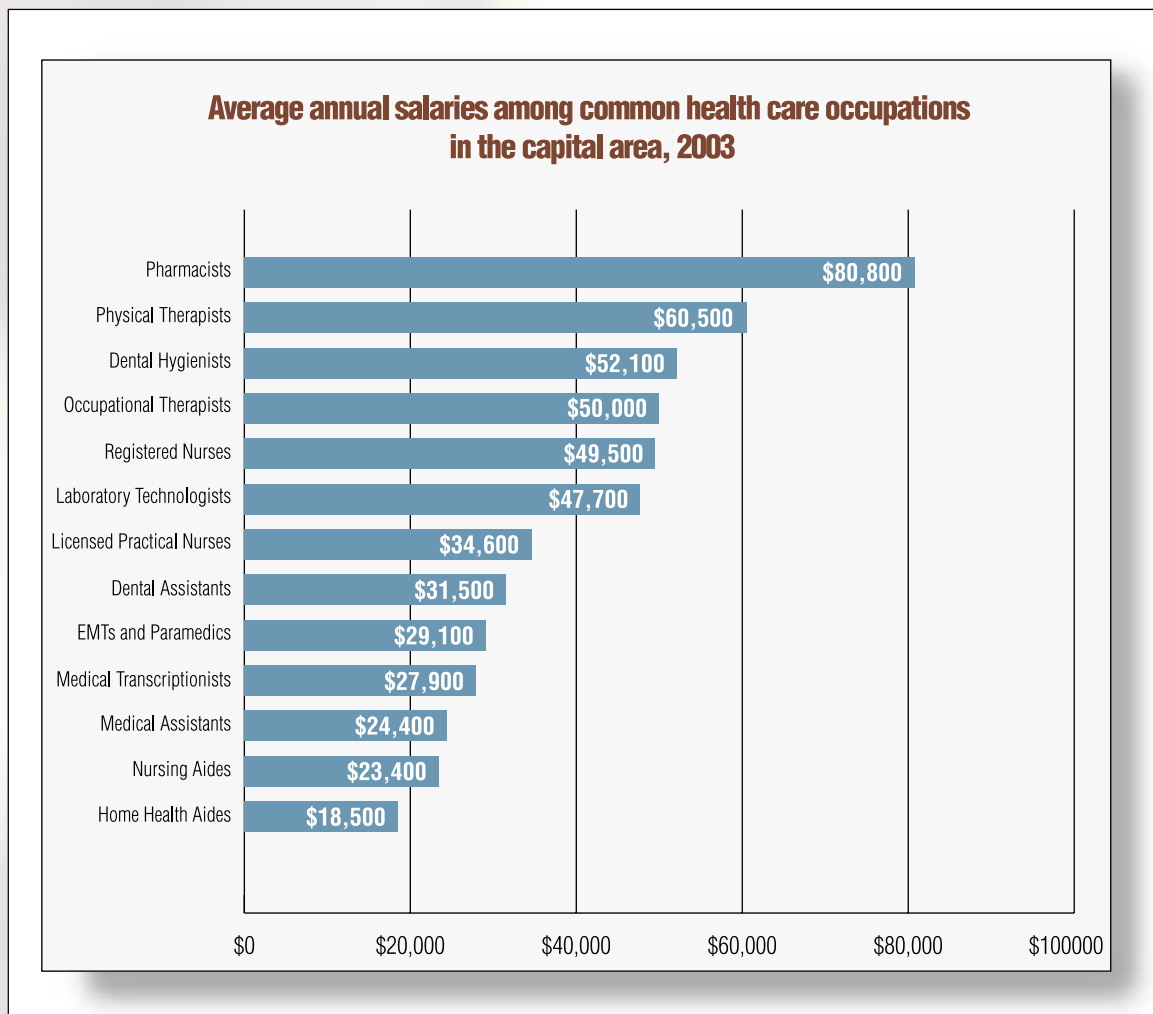
Source: Michigan Department of Labor and Economic Growth, Labor Market Information, 2005.

"Clinton County has a number of good, well-paying jobs in health care that will serve the needs of both those who live and work in Clinton County, as well as those residents who commute to work in Lansing. Encouraging young people to become educated and fill these jobs is very important to Clinton County's economy."

Paul McNamara
Retired President and CEO
Clinton Memorial Hospital

Health care provides opportunities at all skill and pay levels

Area health care jobs needing to be filled in the next several years are at almost all skill levels, education levels and pay levels. Unprecedented opportunities exist for new graduates, those transitioning to new careers and upward mobility of those already working in health care. Practitioners and technicians typically earn above-average salaries. Registered nurses, pharmacists, laboratory technicians and certified therapists are typically paid more than \$45,000 for full-time work, and in some cases the salaries for specialists can be much higher. Pharmacists are paid an average of more than \$80,000 per year in this area, and highly trained certified registered nurse anesthetists (CRNAs) can earn as much as \$150,000 per year or more in the capital area.



Source: Bureau of Labor Statistics, *Occupational Employment Statistics*, November 2003.

No less important are the hundreds of openings expected over the next decade for entry-level positions to assist nursing and technical staff with patients in long-term care facilities, hospitals, nursing homes and behavioral health programs. Many of these positions allow quick access to health care jobs, and although salaries are below average, these can be the first steps in a career ladder that over time will lead to additional training, greater skills and professional certification.

"Michigan's newly formed Michigan State Area Health Education Center (AHEC) offers a valuable coalition of resources aimed at responding to mid-Michigan's future health care workforce needs."

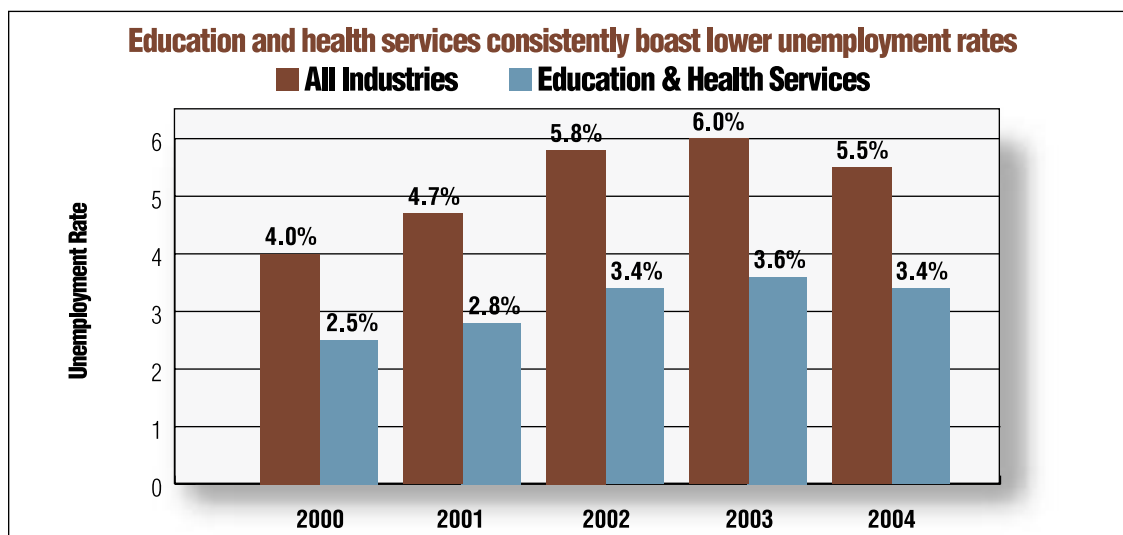
William C. Wadland, MD, MS

Project Director Michigan State AHEC
Professor and Chair, MSU Department of Family Practice
Associate Dean for Faculty Affairs and Development
MSU College of Human Medicine

Health care careers offer stability

Health care employment in the capital area has grown at a steady rate with little of the volatility that has characterized year-to-year changes in manufacturing employment. Health care maintains a consistently lower rate of unemployment than other industries.

Technological innovation in health diagnosis and treatment typically does not reduce employment but, instead requires additional employees to run, calibrate and maintain new equipment and support the health professionals who use the equipment. Most of the services provided by health care professionals, technicians and direct care workers are also not likely to be outsourced to distant locations in the near future. The evolution of delivery systems – such as the growth of outpatient clinics and home health services as reactions to increasing health care costs – will undoubtedly change where and how health care services will be delivered in the future, but health care workers will continue to be needed at the bedside of ailing patients.



Source: Bureau of Labor Statistics, Current Population Survey, 2005.

Some growth of capital area health care employment is related to new health care services and facilities, including free standing surgical and diagnostic centers, urgent care centers for after-hour and minor emergency care, a region-wide network of medical testing laboratories, a comprehensive clinical center on the campus of Michigan State University and the introduction of specialized medical and diagnostic services by each of the area's two major health care systems.

Despite the growth of new and expanded health care facilities, the region's hospitals and extended care facilities will remain the most common places for health care professionals and others to work. **Hospitals currently employ 41 percent of all area health care workers and will continue to be the single largest place for health care employment for the foreseeable future.**

"What is needed are partnerships — because resources are limited, partnerships with providers, policy makers, colleges and government are needed. One entity cannot do this alone."

Roberta Peterson

Dean
Human, Health and Public Service
Careers Division
Lansing Community College

Capital area poised to address labor shortages

Despite recent increases in both enrollment and graduation from the nation's nursing schools, widespread research indicates there will still be critical shortages of nurses and most other health care occupations for years to come. Fortunately, the capital area has a strong core of health care professionals and institutions that are well-positioned to address these shortages.

- * MSU Colleges of Human Medicine and Osteopathic Medicine graduate more than 200 physicians each year, many of whom go on to provide direct care services through residencies and fellowships at local hospitals.
- * MSU College of Nursing graduates approximately 85 RNs each year with a BS degree. In response to the nursing shortage, enrollment will expand to 100 students per year in the fall, and MSU will launch a "2nd Degree" program with 48 students per year.
- * During the first half of the decade, Lansing Community College graduated approximately 85 RNs each year; it has since expanded its program to 100 students per year. LCC also expanded its LPN program to 170 students which should meet area needs for the rest of this decade.
- * Educators at MSU and LCC are initiating programs to upgrade the skills of LPNs and RNs who are already working in the area, including programs such as LPN to RN, RN to BSN, and BSN to Certified Registered Nurse Anesthetist (CRNA).
- * MSU educates speech-language pathologists, clinical laboratory scientists and dietitians. LCC offers certification programs for dental hygienists, paramedics, emergency medical technicians, radiological technicians, diagnostic medical sonographers and massage therapists.
- * Davenport University provides training in Lansing for business applications in the health care industry such as medical billing and medical transcription. A diploma program and an associate's degree for medical assistants are also offered.
- * Several proprietary schools in the capital area provide training for medical assistants, certified nursing assistants and other entry-level health care occupations.

Local output of nurses in coming years will be closer to demand, but there still remains a much higher interest in entering programs than schools are able to accommodate. Michigan State University estimated for its 100 nursing positions, it receives thousands of applications per year. There are other academic careers, however, for which local programs are not currently at capacity, for example, Lansing Community College could immediately grow its surgical technician program if student demand existed.

Sparrow Health System and Ingham Regional Medical Center identified their top “hot jobs” with above-average wages that consistently are unable to be filled, including jobs for which there is local training.

For example, on average, Ingham Regional Medical Center and Sparrow Health System are unable to fill 15 surgical technician positions, despite the 24 students Lansing Community College graduates every spring. The reason is, of the 24 students, some may go to work for other employers such as private offices and clinics and some may move out of the area, leaving open positions in addition to those filled by program graduates. Similarly, Michigan State University graduates between 30 and 40 Medical Technologists each year, but Sparrow and Ingham consistently find themselves short of people to fill the positions. Both LCC’s surgical tech program and MSU’s medical technologist program could immediately train more students to alleviate worker shortages if student demand existed.

Health care jobs that are in demand in the capital area — starting wages and education required						
Occupation	Average number of positions unable to be filled annually at IRMC and Sparrow	Starting Wages	Minimal Educational Requirements	Preparation Offered in Capital Area	Current Program Capacity	Opportunity for Program Growth
CT Technician (Imaging)	5	\$ 39,000	Associates Degree			
Registered Ultrasound Technologist	5	\$ 39,000	Associates Degree	Lansing Community College	24 students/year	Could grow to 28-30 students/year with additional clinical space
Nuclear Medicine Tech	6	\$ 43,000	Associates or Bachelors Degree			
Physical Therapist	16	\$ 49,000	Masters Degree			
Respiratory Therapist	11	\$ 39,000	Associates Degree			Lansing Community College program will begin with Ferris State University in Fall 2005. Will likely accommodate 20-24 students.
Speech-Language Pathologist	6	\$ 44,000	Masters Degree	Michigan State University	25-30 students/year	Cannot grow without additional funding
Surgical Technician	15	\$ 32,000	Associates Degree	Lansing Community College	24 students/year	Could grow immediately if student demand existed
Registered X-Ray Technician	8	\$ 35,000	Associates Degree	Lansing Community College	35 students/year	Could grow with additional clinical space
Registered Nurse	150	\$ 42,000	Associates Degree, Bachelors Degree, Masters Degree	Lansing Community College, Michigan State University	LCC—184 students/year MSU—100 students/year	MSU will begin a “fast-track” program in Fall 2005. Both programs cannot grow without additional funding
Certified Registered Nurse Anesthetist	5	\$ 135,000	Masters Degree			
Medical Technologist	6	\$ 42,000	Bachelors Degree	Michigan State University	30-40 students/year	Currently has openings in program

Source: Ingham Regional Medical Center, Sparrow Health System, Lansing Community College and Michigan State University



Can the capital area be a center of medical excellence?

Health care leaders in the capital area believe one of the factors in enhancing the economic advantages of the capital area health care sector is for the area to gain a reputation as a center of excellence in medicine and related health care services. Right now the capital area lacks the reputation of Ann Arbor, and capital area residents often leave the area for more specialized care in Ann Arbor, Detroit, at the Cleveland Clinic or at the Mayo Clinic.

Local health care leaders believe the capital area could emerge as a regional center of excellence in the near future, building on hospital-based programs in cancer treatment, cardiology, orthopedics and neurology. Others see the area's reputation being built on primary care and internal medicine, both of which are among the strongest areas for the region's medical schools.

In either case, the transition of the capital area from a region that exports patients to one that attracts patients from all over lower Michigan will involve expanding the area's two medical schools, promoting more biomedical research and attracting more highly specialized faculty and practitioners to the area. First steps in expanding both medical schools' enrollments are already under way.

Meeting the health workforce challenge — a call to action

The capital area seems well on its way to meeting the local need for more nurses at all education levels, and discussions about expanding the area's two medical schools are currently under way. Major challenges still exist, however, to meet the other workforce needs of capital area health care employers, to encourage more new entrants to the labor force and to transition workers from other industries in order to have the capital area emerge as a center of health care excellence.

Specific challenges include:

- **Filling local higher-education programs that are not at capacity by Fall 2005 Semester** — The capital area's education providers could immediately produce more workers in Lansing Community College's surgical technician program, its new respiratory therapist program with Ferris State University and in Michigan State University's medical technologist program if more students enrolled. Students need to be alerted to and recruited for immediate openings in the programs by Fall Semester 2005.
- **Recruiting or developing new programs for additional in-demand careers in health care** — Ingham Regional Medical Center and Sparrow Health System both have immediate demand for CT Technicians, nuclear medicine techs, physical therapists and certified registered nurse anesthetists. No training is available in the area for the programs.
- **Increasing clinical training opportunities** — Nursing and other professional education that requires clinical experience face roadblocks due to shortages of qualified clinical instructors in hospitals and elsewhere and fewer facilities that offer all required specialties. Clinical psychiatric nursing rotations are among the hardest to find. Lansing Community College's registered ultrasound technologist and registered X-Ray technician programs could both grow with more clinical space.
- **Maximizing funds for health career education** — Educational administrators report health care career classes are typically five times costlier than traditional undergraduate liberal arts classes. Nursing, medicine, pharmacy, dental and therapist education are even more expensive. Michigan State University's speech-language pathologist and nursing programs, as well as Lansing Community College's nursing programs, cannot grow without additional funding.
- **Increasing K-12 training in science and mathematics** — Health care occupations are becoming more technically demanding and require more high school preparation in the sciences and mathematics to ensure high rates of completion among health career students.
- **Creating greater awareness of health care careers among high school counselors, teachers and parents** — Health care professional and technical careers, are hindered by limited knowledge among students, counselors, teachers and parents alike about health care opportunities other than nursing or medicine.
- **Increasing diversity in the health care workforce** — Men and minorities are severely underrepresented in the field. Those minorities in the health care field are represented in higher percentages at the lower end of the career ladder, calling for more creative programs to make it possible for incumbent workers to become better educated, more skilled and to take on more responsibilities at higher professional levels. Increased diversity will also provide a larger pool of candidates for entry into the field to reduce shortages.
- **Increasing health career faculty** — One of the greatest barriers facing health care education is the shortage of qualified faculty in almost all fields. Nursing and other health care faculty are getting older and retiring, and qualified health care faculty can often earn more money providing health care services, or as administrators, than by teaching others.
- **Ensuring the capital area gets the "right" workers** — Recruitment and education is not enough. More screening needs to be conducted with prospective employees to make sure the most appropriate individuals become health care professionals, technicians and direct-care providers to prevent dissatisfaction and high rates of turnover. More screening must be conducted to identify prospective employees who are truly interested in working with the ill, the infirm and the elderly, as well as those who are comfortable having direct physical contact with the people they will be caring for.

Capital area health care and educational leaders agree collaboration among all of the key organizations and institutions within the area is critical in meeting healthcare's workforce demands and becoming a center of excellence.

This means collaboration among all health care organizations, educational organizations, individual health care practitioners, professional associations and community workforce development agencies. As one leader indicated, "If this area does not become a destination for health care services for both residents of this region as well as from surrounding areas, the capital area will eventually become just a 'suburb' of the state's larger cities. But we can only become a health care destination through collaboration between all of the major players in the region."

References

American Medical Association. *Health Professions: Career and Education Directory, 2004-2005*. AMA: Chicago, 2004.

Bernard Hodes Group, Hodes Research Online. "Healthcare Metrics Survey-National Sample." www.hodes.com

Bureau of the Census, County Business Patterns, Michigan. <http://censtats.census.gov/cgi-bin/cbpnaic/cbpsel.pl>

Bureau of the Census, Population Estimates "Annual Estimates of the Population for Counties of Michigan: April 1, 2000 to July 1, 2003." <http://www.census.gov/popest/counties/tables/CO-EST2003-01-26.xls>

Bureau of Economic Analysis, Regional Economic Accounts, 2004. <http://www.bea.doc.gov/bea/regional/gsp.htm>

Bureau of Labor Statistics, *Current Employment Statistics*, 1990-2003. <http://www.bls.gov/sae/home.htm>

Farquar, Lynn, MSU College of Human Medicine, personal conversation, February 2005.

First Consulting Group. *"The Healthcare Workforce Shortage and Its Implications for America's Hospitals."* San Diego, CA: First Consulting Group (on behalf of the American Hospital Association), 2001.

Kniffen, Colleen, MSU College of Osteopathic Medicine, personal conversation, February 2005.

The IMPLAN(r) Group, Inc. *The Economic Impact of Health Care in Michigan*. Lansing, MI: The Partnership for Michigan's Health, 2004.

Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives. Occupational Employment Forecasts, 2002 - 2012. http://www.michlmi.org/LMI/occ_proj/occ_cnty.htm

Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives. Industry Employment Forecasts, 2002 - 2012. http://www.michlmi.org/LMI/ind_proj/ind_cnty.htm

Public Policy Associates, Incorporated. *Health Care Workforce Development in Michigan*. Lansing, MI: Michigan Department of Labor and Economic Growth, 2004

U.S. Department of Health and Human Services, Centers for Medicaid and Medicare Services, Office of the Actuary, 2004.

Tripp Umbach Healthcare Consulting, Inc. *The Economic Impact of Michigan State University College of Human Medicine on the State of Michigan and Grand Rapids Region: Projected Impacts in 2010 and 2015*. Final Executive Report. Pittsburgh, PA: 2004.

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